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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,029	10/15/2003	Mark A. Clarner	05918-338001 / VGCP No.	2177
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FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			EXAMINER SANDY, ROBERT JOHN	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/688,029

Applicant(s)

CLARNER, MARK A.

Examiner

Robert J. Sandy

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/18/05, 12/31/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

Claim 23 has been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 28 February 2005 (cert. of mail date) .

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed feature requiring “a backing material laminated to a side of the base opposite the fastener elements” (claim 18) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

The disclosure is objected to because of the following informalities: Re: Missing text. Applicant is reminded to provide the appropriate U.S. Serial Number (e.g., 10/688,320) on page 8, line 7. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14, 15, and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to provided a detailed written and enabling disclosure corresponding to the claimed subject matter pertaining to: wherein each fastener element has an overall height of between about 10 and 50 millimeters (claim 14); wherein each fastener element has an overall height of between about 20 and 30 millimeters (claim 15); and wherein each fastener element head has an overall height of between about 10 and 20 millimeters (claim 16). Mere nominal recitation in applicant's "Summary" does not fulfill the enablement requirement under 35 U.S.C. 112, first paragraph. Applicant's "Detailed Description" appears to only support an embodiment not claimed, where that embodiment, mentioned on page 7, is to a fastener component having a height dimensions A and J not within the claimed ranges.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12, 13, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Erb (U. S. Patent No. 3,665,584, cited by applicant). Erb ('584) discloses a touch fastener component having a sheet-form base (11) and an array of fastener elements (see Fig. 7), each fastener element comprising: a stem extending outwardly from and integrally with the sheet-form base, and a head extending from a distal end of the stem to a tip to overhang a forward edge of

Art Unit: 3677

the stem, the head having a lower surface forming an arched crook for retaining loops; wherein the crook defines an under crook angle, measured about the crook in side view from a line normal to the forward edge of the stem at an elevation from the base corresponding to a lowermost extent of the tip, to a normal to the lower head surface, that is greater than about 180 degrees;

**FIG. 7**

(concerning claim 2) Erb's ('584) Fig. 7 discloses wherein each fastener element has multiple heads (25) extending in different directions and forming separate crooks;

(concerning claim 3) Erb's ('584) Fig. 7 discloses wherein each fastener element has two heads extending in essentially opposite directions;

(concerning claim 4) Erb's ('584) Fig. 7 discloses wherein each fastener element defines an upper well between the two oppositely-directed heads, the well extending down to a height, measured perpendicularly from the base, of at least about 70 percent of the overall height of one of the two oppositely-directed heads;

(concerning claim 5) Erb's ('584) Fig. 7 discloses wherein each fastener element has an overall length between opposite extents of the oppositely-directed heads, measured parallel to the base, of at least 1.8 times the overall height of the fastener element;

(concerning claim 6) Erb's ('584) Fig. 7 discloses wherein a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6;

(concerning claim 7) Erb's ('584) Fig. 7 discloses wherein the head has an overall thickness, measured parallel to the base and perpendicular to a plane of the crook, that is greater than an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip;

Art Unit: 3677

(concerning claim 8) Erb's ('584) Fig. 7 discloses wherein the head and stem form a unitary molded structure;

(concerning claim 11) Erb's ('584) Fig. 7 discloses wherein the stem and head have side surfaces lying in parallel planes;

(concerning claim 12) Erb's ('584) Fig. 7 discloses wherein the forward edge of the stem extends at an inclination angle of between about 20 and 30 degrees with respect to a normal to the base;

(concerning claim 13) Erb's ('584) Fig. 7 discloses wherein the inclination angle is about 23 degrees;

(concerning claim 21) Erb's ('584) Fig. 7 discloses wherein the under crook angle is at least about 190 degrees; and

(concerning claim 22) Erb's ('584) Fig. 7 discloses wherein the under crook angle is about 200 degrees.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erb ('584) in view of Lacey et al. (U. S. Patent No. 6,163,939, cited by applicant). Erb ('584) further discloses wherein the head has a surface of plastic material (i.e., "a plastic material", col. 2, line 12) cooled (i.e., "a cooling means..." see col. 2, line 30) against a mold surface (i.e., of "forming die 14", col. 2, line 32), and that the stem has opposing surface define by severed (i.e., "rails 12 will be cut . . .", see col. 2, lines 33-34). plastic material. However, Erb ('584) fails to describe the suitable plastic material explicitly as a resin. In view of Lacey et al. ('939), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed Erb's ('584) fastener head and stem of a resin material, since Lacey et al. makes it known

Art Unit: 3677

that resin was a well known material in the manufacture of touch fasteners where molds and cooling comprised the method of forming the fasteners (see col. 2, lines 56-64).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erb ('584) in view of Romanko et al. (U. S. Patent No. 6,484,371). Erb ('584) discloses the claimed fastener component except for wherein the component further comprising a backing material laminated to a side of the base opposite the fastener elements. In view of Romanko et al. ('371), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a backing material laminated to a side of the base opposite the fastener elements of Erb ('584), since Romanko et al. ('371) describes and shows a fastener 30 (see Figs. 3a-3g) having a backing material including loops 37, film layer 31, and adhesive layer 35 laminated to a side of the base opposite the fastener elements 33, in order to provide "hook-and-loop type a bundling or strap fasteners" (col. 7, line 36) that are well known for their use in bundling articles together, such as bundling cables.

Claims 14, 15, 16 and 17, so far as definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Erb ('584). Erb ('584) discloses the claimed fastener component except for describing the fastener element dimensions having an overall height of between about 10 and 50 millimeters, or between about 20 and 30 millimeters, wherein each fastener element head has an overall height of between about 10 and 20 millimeters; and wherein each fastener element crook defines an overall crook height, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, of at least 6.0 millimeters. It would have been obvious and within routine skill to one of ordinary skill in the art at the time the invention was made to have adjusted each of the overall heights of the fastener elements, fastener element head, and crook, such as to the fastener by Erb ('584), since dimensional characteristics are routinely selected according to the fasteners intended use. Fastener characteristics regarding overall heights of fastener elements, fastener element heads, and crook, are adjusted to a higher height in applications where the fastener component may be embedded in a foam substrate of an upholstered chair for subsequently attaching a fabric cover thereto. The overall heights of the fastener element characteristics are adjusted to smaller heights for use as conventional touch fasteners for providing a fabric like texture to garment closure fasteners.

Art Unit: 3677

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erb ('584) in view of Ikoma et al. (U. S. Patent No. 3,577,607). Erb ('584) discloses the claimed fastener component except for explicitly describing wherein the fastener elements are arranged in a density of at least 350 fastener elements per square inch of the base; and wherein the fastener elements together cover at least 20 percent of an overall surface area of the base from which the fastener elements extend. Ikoma et al ('607) teaches that was known to provided engaging projections 26 of 60 projections per square centimeter (col. 3, lines 14, 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided engaging projections 26 of 60 projections per square centimeter, as suggested by Ikoma et al. ('607), as well as the fastener elements together cover at least 20 percent of an overall surface area of the base from which the fastener elements extend, since it is within routine skill in the art to determine a particular number and distribution density of fastening elements in accordance by the size and nature of the opposing material to be gripped and application of use.


### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Sandy whose telephone number is 571-272-7073. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ROBERT J. SANDY  
PRIMARY EXAMINER